

(iii) incubation of the activated oocyte to provide an embryo;

wherein the donor cell nucleus is from a non-human mammalian differentiated cell in the G1 phase of the cell cycle and wherein said embryo is capable of developing to term.

35. (NEW) The method of claim 34, wherein said non-human mammalian embryo is selected from the group consisting of sheep, cows, pigs, horses, rabbits, rodents, mice, and rats.

36. (NEW) The method of claim 34, wherein said non-human mammalian embryo is an ungulate.--

REMARKS

Reconsideration of this application is respectfully requested.

New claims 20-36 are derived from canceled claim 19 and are fully supported by the specification, for example, as follows:

Claim

Support

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original claims 1, 3, and 6
page 5, lines 1-28
page 7, lines 16-21
page 8, lines 9-22 and 29-33
page 9, line 7
page 10, lines 18-24
page 12, lines 22-28
page 16, lines 3-20
page 19, lines 17-28
pages 21-28

21

page 25, line 31, through page 26, line 10

22

page 16, lines 3-20

23-25, and 27

page 6, line 24, through page 7, line 14
original claim 4

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26, 30, 32, and 35	original claim 3 page 5, lines 14-28
28, 33, and 36	original claim 2 page 5, lines 20-24
29	page 8, lines 13-17
31 and 34	original claims 1-3, and 6 page 5, lines 1-28 page 7, lines 16-21 page 8, lines 9-22 and 29-33 page 9, line 7 page 10, 18-24 page 12, lines 22-28 page 17, lines 1-3 page 19, lines 17-28 pages 21-28.

No new matter enters by amendment. Upon amendment, claims 20-36 are pending in this application.

Claims 20-36 are directed to the same or substantially the same invention as claimed in U.S. Patent No. 6,235,970 of Stice et al., issued May 22, 2001.

Applicants' related copending application 09/650,194 is presently involved in Interference No. 104,746 with U.S. Patent No. 5,945,577 of Stice et al. and in Interference No. 104,809 with another party. U.S. Patent No. 6,235,970 of Stice et al. is related as a divisional application to U.S. Patent No. 5,945,577 of Stice et al.

Applicants' involved claims in Interference No. 104,746 and Interference No. 104,809 are directed to methods of cloning non-human mammals and non-human mammalian fetuses.

Double Patenting Rejection

Claim 19 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,252,133.

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Solely to expedite allowance of the pending claims, and not in acquiescence to this rejection, applicants submit herewith a Terminal Disclaimer in compliance with 37 C.F.R. § 1.321(b).

Claim 19 was provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of U.S. Application Serial No. 09/989,125. It is the Examiner's position that, to be in G1, the donor cell of the present claim would have had to pass start.

Applicants respectfully disagree. Cells in G1 would not have had to pass through start. As described in the specification, cells in the G1 phase of the cell cycle that have passed through start have made the commitment to undergo another cell cycle. (Specification at 7, lines 26-32.) Cells in the G1 phase of the cell cycle that have not passed through start have not made this commitment. Consequently, cells in the G1 phase of the cell cycle may have made or not made this commitment depending on whether they have passed through start.

Solely to expedite allowance of the pending claims, and not in acquiescence to this rejection, applicants submit herewith a Terminal Disclaimer in compliance with 37 C.F.R. § 1.321(b).

Claim 19 was provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 19 of U.S. Application Serial No. 09/989,128.

Solely to expedite allowance of the pending claims, and not in acquiescence to this rejection, applicants submit herewith a Terminal Disclaimer in compliance with 37 C.F.R. § 1.321(b).

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Rejection Under 35 U.S.C. § 112, Second Paragraph

Claim 19 was rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite in reciting that "the donor cell nucleus is from a mammalian differentiated cell." Claim 19 has been canceled.

As recommended by the Examiner, new claims 31-36 recite that the mammalian differentiated cell is non-human. Accordingly, applicants respectfully request withdrawal of the rejection.

Applicants respectfully submit that this application is now in condition for allowance. If the Examiner believes that issues remain to be addressed before a Notice of Allowance, applicants respectfully request that the Examiner contact the undersigned to discuss any outstanding issues.

Respectfully submitted,

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